

Claims

1. An optical communications adapter module, comprising:
 - a XENPAK-sized casing;
 - an XFP board assembly having an optical transmission connector and an optical reception connector, the XFP board assembly being positioned within the casing so the optical transmission connector and the optical reception connector are positioned in connector openings at a first end of the casing; and
 - a conversion board being coupled to the XFP board, the conversion board configured to be capable of communicating data between the XFP board assembly and a client computing device.
2. An optical communications adapter module as recited by claim 1, wherein the casing includes a bottom portion, a top cover, and a face plate.
3. An optical communications adapter module as recited by claim 1, wherein the conversion board includes,
 - a conversion chip capable of communicating data between the client computing device and the XFP board assembly.
4. An optical communications adapter module as recited by claim 3, wherein the conversion chip is configured to convert data received from a 10 gigabit per second attachment unit interface (XAUI) to data capable of being communicated through a serial interface, and the conversion chip is configured to convert data

received by a serial interface to data capable of being communicated through the XAUI.

5. An optical communications adapter module as recited by claim 3, wherein the conversion chip is capable of communicating data with a first electrical connector configured to connect with the client device and capable of communicating data with a second electrical connector configured to connect with the XFP board assembly.

6. An optical communications adapter module as recited by claim 3, wherein the conversion board includes a microprocessor.

7. An optical communications adapter module as recited by claim 6, wherein the conversion board is configured to communicate with the microprocessor.

8. An optical communications adapter module as recited by claim 1, wherein the conversion board includes a first electrical connector configured to connect with the XFP board assembly and a second electrical connector configured to connect with the client device, the second electrical connector positioned at a second end of the XENPAK-sized casing when coupled to the XFP board assembly.

9. A method to communicate data, comprising: ✓
receiving communication signals from a client device, by a communications adapter module, through a conversion board of the communications adapter module;
routing the received communication signals from the conversion board to an optical communications board assembly; and
transmitting the communication signals onto a network by the optical communications board assembly.

10. A method to communicate data as recited in claim 9, wherein receiving communication signals from the client device includes receiving the communications signals through an electrical connector of the conversion board.

11. A method to communicate data as recited in claim 9, wherein receiving communication signals from the client device includes receiving the communication signals by the conversion board positioned at a rear portion of the communications adapter module.

12. A method to communicate data as recited in claim 9, wherein routing the received communication signals from the conversion board to the optical communications board assembly includes routing the received communication signals to an XFP board assembly.

13. A method to communicate data as recited in claim 9, wherein transmitting the communication signals onto the network includes transmitting the communication signals from an optical connector of the optical communications board assembly to the network.

14. An optical communications system, comprising:
a client computing device including a microprocessor and a network processor coupled to one another; and
an optical communications adapter module coupled to the client computing device, the optical communication adapter module including an XFP board assembly housed in a XENPAK-sized casing and a conversion board.

15. An optical communications system as recited in claim 14, wherein the optical communications adapter module includes,
an optical transmission connector and an optical reception connector located on the XFP board assembly, the XFP board assembly being positioned within a XENPAK-sized casing so the optical transmission connector and the optical reception connector are positioned in connector openings at a first end of the casing.

16. An optical communications system as recited in claim 14, wherein an electrical connector of the XFP board assembly is extended to be positioned into a rear portion of the casing by the conversion board.

17. An optical communications system as recited in claim 14, wherein the conversion board is coupled to the XFP board and is capable of communicating data between the XFP board assembly and the client computing device, the conversion board being configured to have an electrical connector at a second end of the XENPAK-sized casing.

18. An optical communications system as recited by claim 14, wherein the conversion board includes,
a conversion chip capable of communicating data between the client computing device and the XFP board assembly.

19. An optical communications system as recited by claim 18, wherein the conversion chip is configured to convert data received from a 10 gigabit per second attachment unit interface (XAUI) to data capable of being communicated through a serial interface, and the conversion chip is configured to convert data received by a serial interface to data capable of being communicated through the XAUI.

20 An optical communications system as recited by claim 18, wherein the conversion chip is capable of communicating data with a first electrical connector configured to connect with the client device and capable of

communicating data with a second electrical connector configured to connect with the XFP board assembly.